

52. (Previously Claim No. 35) A multi-chip memory module comprising:

at least two identical, standard surface mount memory chips, each chip having identical pins arranged in respective pin positions along a side of the chip, the pin positions of the chips being identical, a first pin position being at one end of the chip and a last pin position being at the other end of the chip with intermediate pin positions therebetween, the chips being stacked with an upper one of the chips positioned above a lower one of the chips, the upper and lower chips further being arranged with corresponding pin positions above each other generally in vertical alignment;

first and second support structures, each support structure having a generally uniform rectangular cross-sectional shape and also having upper and lower series of contacts electrically connected to said two identical chips, respectively, through at least some of said pins, each series of contacts having contacts corresponding to the first and last pin positions along the side of the chip, at least some of said contacts in the upper and lower series corresponding to intermediate pin positions of said pins; and

a conductive path electrically connecting a first contact in the lower series of contacts with a second contact in the upper series of contacts, the first contact corresponding to a pin position of a pin of the lower-most chip that is unused in the memory module, and the second contact corresponding to a functional pin with a different pin position than that of the unused pin so as to provide electrical access to the functional pin from the pin position corresponding to the first contact.

53. (Previously Claim No. 36) A module as in Claim 35, wherein the conductive path electrically connects only two of the contacts.

54. (Previously Claim No. 37) A module as in Claim 35, wherein each support structure is comprised of a printed circuit board material on which the upper and lower series of contacts are disposed, and the pins of the lower chip are disposed relative to a bottom surface of the support structure such that when the multi-chip module is surface mounted to the memory board at least some of the pins of the lower chip are soldered to the lower series of contacts on the support structure and to the memory board.